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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,910	06/29/2001	Nagesh R. Basavanhally	27-10-8-7-40	9485

7590 03/29/2004

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Rd.
Holmdel, NJ 07733-3030

EXAMINER

HYEON, HAE M

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,910

Applicant(s)

BASAVANHALLY ET AL.

Examiner

Hae M Hyeon

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22-39, 41 and 43-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-37 is/are allowed.
- 6) ☒ Claim(s) 1-17, 19, 20, 23-29, 38, 39, 41, 45 and 46 is/are rejected.
- 7) ☒ Claim(s) 18, 22, 43 and 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Amendment filed on January 5, 2004 stated that claims 21, 40 and 42 have been canceled, but the claims filed with this Amendment shows original claim 40 in the listing of claims. Thus, the applicant's intension is not clear whether the applicant wants to keep or to cancel claim 40. Since this claim was objected claim, the examiner considered this claim to be cancelled.

Drawings

2. The drawings were received on January 5, 2004. These drawings are approved.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-17, 19, 20, 25-29, 38, 39, 41, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al (5,675,680) in view of Gutierrez et al (6,595,698 B2).

Ames discloses an apparatus comprising a chuck 42, a plurality of precision ferrules 40 with a hole 50, and a plurality of optical fibers 48 bonded within the hole 50 of the ferrules 40. The chuck 42 holds the ferrules in an array with hexagonal packing. The fibers are bonded within the holes using a potting material 46 such as an epoxy, which is glue. Also, potting

Art Unit: 2839

material 46 maybe used to fix the ferrules 40 together, which is disposed between the chuck 42 and the ferrules 40. The chuck 42, itself is flexible, therefore, the chuck 42 includes at least one flexible member. Figure 1 of Ames shows a ferrule having an end with a conical tip and other end with conical entrance. Figure 23 of Ames shows the ferrules 40 being fixed in an angled to for a connector with an angled face. However, Ames does not disclose at least one additional ferrule having at least one hole that does not have bonded therein a fiber end. Although Ames does not disclose a fiber not bonded in the hole of the additional ferrule, it is an obvious design alternative because the ferrules and the fibers are initially made separately. Then the fibers are fixed to the ferrule with a bonding material. Therefore, the fibers are initially not bonded to the ferrules. Thus, bonding some of the fibers to the ferrules and leaving at least one ferrule without a fiber does not solve any problem. A fiber can be fixedly bonded to a ferrule or a ferrule can be left without a fiber. Furthermore, Ames does not disclose the fibers 48 being cleaved.

Gutierrez, however, discloses that top end of the fibers 200A-200C is removed by cleaving or etching. Furthermore, Gutierrez teaches a various sizes for a hole 102 that receives a fiber 200 (see column 3, lines 40-54), a high precision ferrule made of ceramic and gluing a fiber in the ferrule (see column 1, lines 18-24).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the ferrule taught by Ames such that it would have the size and material as taught by Gutierrez because the size of the ferrule can be changed according to the designer's preference and ceramic is a commonly known material for making a ferrule. Lastly, cleaving a fiber is one of the most commonly known methods of cutting the fiber.

Regarding to claims 3, 5-7, 16, 17, 20 and 46, Claim 3 is not reciting the structure of the claimed invention, but only reciting the intended used of the claimed invention. Claims 5-7 and

Art Unit: 2839

16 recite dimensional size of the claimed invention. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 17, 20 and 46 recite preferred materials for the ferrule and the non-rigid material. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. For claim 28, it is a common knowledge for using holes for mounting.

5. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames et al in view of McNerney et al (6,478,606 B1).

Claims 23 and 24 recite a reinforcing sleeve coupled to the chuck. While Ames does not disclose a reinforcing sleeve, McNerney discloses a reinforcing sleeve 31 for securely bonding wires together. McNerney teaches making the reinforcing sleeve 31 integrally and separately with a main body 13.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the apparatus taught by Ames such that it would have a reinforcing sleeve as taught by McNerney to bond wires or optical fibers securely together.

Allowable Subject Matter

6. Claims 30-37 are allowed.

7. Claims 18, 22, 43 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2839

8. The following is an examiner's statement of reasons for allowance: Claim 30, which was objected to as being dependent upon a rejected base claim, has been rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

9. Applicant's arguments filed on January 5, 2004 have been fully considered but they are not persuasive. The applicant incorporated a portion of the limitations of the objected claims into the independent claims. The applicant argues that the amended claims are now in condition for allowance. However, the examiner disagrees because the portion of the limitations the objected claims that the applicant added to the independent claims does not solve any specific problem or create a new thing. The added portion of the objected claims recites, "at least one additional ferrule having at least one hole therethrough that **does not have bonded** therein a fiber end." Initially, the fibers and the ferrules are made separately. Then the fibers are inserted into the holes of the ferrules and bonded in the holes to fix the fibers in the holes. Therefore, leaving at least one ferrule to not have bonded fiber end only deals with not fixing fibers to all the holes of the ferrules. In other word, leaving a desired number of ferrules without a fiber end bonded in the hole of the ferrule is an obvious design alternative that does not solve any problem since the instant invention includes a plurality of ferrules and fibers. The reason for the examiner to state claims 18, 22 and 42 being allowable is that the ferrules without a fiber bonded

Art Unit: 2839

are **adapted to align** the apparatus to a further device to which the apparatus is coupled.

Without the function of alignment of the apparatus, bonding and not bonding the fibers in the holes are not solving any problems or creating a new thing.

The examiner apologizes for including claim 21 in the allowable subject matter. Claim 21 is not allowable since only recites a ferrule without a fiber and it does not recite a ferrule having an alignment member for aligning function.

Regarding to the newly added claims 45 and 46, the applicant argues that claims 45 and 46 recites for non-rigid material, but the epoxy or potting material taught by Ames is considered as a rigid material because it dries and becomes rigid. Therefore, the reference by Ames does not conform to the recited limitation. The examiner agrees with the applicant. However, as stated in the above rejection, the specific materials, plastic, polyester, and polyimide, as recited in claim 46 are well known materials. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose AU is 2839 and whose telephone number is 571-272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2839

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the telephone number 571-272-2800 ext 39.

Any response to this action may be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

For additional information regarding this new address, which was effective May 1, 2003, *see Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

Hae M Hyeon

Examiner

Art Unit 2839

hnh

hnh

Hae Moon Hyeon